

**REMARKS**

Claims 27, 28, 32, 42, and 46 remain pending, and claims 33-41 and 47-52 are withdrawn from consideration for examination as drawn to a non-elected species.

In the final Office Action, the Examiner maintained the rejection of claims 27, 28, 32, 42, and 46 under 35 U.S.C. § 103(a) as anticipated by Metz et al. (U.S. Patent No. 5,666,293) in view of Yen (U.S. Patent No. 6,381,694). Applicants traverse this rejection, because a prima facie case of obviousness has not been established by the Examiner.

Metz et al. and Yen, taken alone or in combination, fail to teach or suggest each and every element of the rejected claims. For example, claim 27 recites, inter alia,

a non-volatile random access memory (NVRAM), including

a first domain,

a second domain for storing a control program,

a third domain for storing a downloading program for controlling a download procedure, wherein during the download procedure the control program stored in the second domain is updated, and

a fourth domain for storing a bootstrap program, wherein the bootstrap program controls an initial boot routine,

wherein the first domain stores one of a version number of the control program stored in the second domain or a predetermined number indicating that the download procedure for updating the control program in the second domain was suspended due to a power failure or a signal transmission error, and wherein the initial boot routine includes checking whether or not a value stored in the first domain is the predetermined number and, when the value is the predetermined number, automatically updating the control program.

Applicants previously argued, and the Examiner correctly recognized, that Metz et al. fails to teach or suggest at least "wherein the initial boot routine includes checking

whether or not a value stored in the first domain is the predetermined number and, when the value is the predetermined number, automatically updating the control program," as recited in claim 27. Request for Reconsideration filed on April 8, 2005 (Response of April 8, 2005), page 3; Office Action, page 4.

Applicants pointed out that Yen fails to cure these deficiencies of Metz et al. Response of April 8, 2005, pages 3-4. The Examiner was not persuaded and alleged, "the combination of Metz & Yen does meet the claimed language." Office Action, page 4. The Examiner stated, "Yen is cited for the teaching of checking the status of the operating system during the initial boot routine." Office Action, page 4. However, even if Yen is cited for teaching of checking the status of the operating system during the initial boot routine, a combination of Metz et al. and Yen still fails to teach or suggest at least updating the control program during the initial boot routine.

More specifically, Metz et al. teaches "[t]he DET microprocessor 105 then performs a checksum operation on the data file to determine if there are any errors in the received data (step S6). If the checksum result is not valid, . . . then the microprocessor 110 returns to step S5 and again extracts the relevant operating system file from the broadcast carousel." Metz et al., col. 37, ll. 44-52, and Fig. 9. The updating of the operating system as taught by Metz et al. is not performed during an initial boot routine; rather, it is performed when the old operating system is already running. See Metz et al., col. 38, ll. 27-34, and Fig. 9.

In addition, Yen teaches, "[i]f an error is detected which would normally result in an operational failure, the computer branches to recovery software stored in the secondary volume." Yen, col. 2, ll. 2-7. Moreover, "[w]hen the booting process is

completed with the use of the alternate system, an appropriate form of notification can be provided to the user. . . . [S]creens such as those shown in FIGS. 5-7, can guide the user through appropriate steps for attempting to correct the problem.” Yen, col. 5, ll. 36-49. Yen does not teach or suggest automatically updating a control program.

Thus, Metz et al. and Yen, even combined, fail to teach or suggest at least “wherein the initial boot routine includes . . . automatically updating the control program,” as recited in claim 27.

In addition, Metz et al. fails to teach or suggest at least “wherein the first domain stores one of a version number of the control program stored in the second domain or a predetermined number indicating that the download procedure for updating the control program in the second domain was suspended due to a power failure or a signal transmission error,” as recited in claim 27, and Yen fails to cure these deficiencies of Metz et al.

According to Metz et al., after an operating system is downloaded, two checks are performed. First, “a checksum operation on the data file [is performed] to determine **if there are any errors in the received data** (step S6).” Metz et al., col. 37, ll. 45-48, emphasis added. Second, “[t]he operating system file downloaded . . . also includes a bit pattern code used to indicate **that the data is a valid operating system for the particular type of set-top**,” and “microprocessor 110 compares the bit pattern from the broadcast operating system now loaded in RAM 122 to the valid bit pattern stored in ROM 115.” Metz et al., col. 37, l. 60 - col. 38, l. 1, emphasis added. Clearly, the bit pattern code indicates whether an operating system downloaded is for the right type of

set-top, not whether the downloaded operating system contains error, nor whether the download process was interrupted unexpectedly.

Therefore, the bit pattern code of Metz et al. cannot correspond to Applicants' claimed "predetermined number," which "[indicates] that the download procedure for updating the control program . . . was suspended due to power failure or a signal transmission error." The Examiner may at most argue that the checksum result of Metz et al.'s determination of whether "there are any errors in the received data" corresponds to Applicants' claimed "predetermined number." However, Metz et al. does not teach or suggest, and actually teaches away from, storing the checksum result in a non-volatile memory.

Therefore, Metz et al. fails to teach or suggest at least "wherein the first domain stores one of a version number of the control program stored in the second domain or a predetermined number indicating that the download procedure for updating the control program in the second domain was suspended due to a power failure or a signal transmission error," as recited in claim 27. Yen also fails to teach or suggest at least "a non-volatile random access memory . . . wherein the first domain stores one of a version number of the control program stored in the second domain or a predetermined number indicating that the download procedure for updating the control program in the second domain was suspended due to a power failure or a signal transmission error," as recited in claim 27.

In view of the above, Metz et al. and Yen, taken alone or in combination, fail to teach or suggest each and every element of claim 27. Claim 27 is therefore allowable

over Metz et al. and Yen. Claims 28 and 32 depend from claim 27 and are also patentable over Metz et al. and Yen at least for the same reasons as claim 27.

In addition, claim 42 recites a method for downloading a control program that includes, inter alia,

writing a predetermined value in a version domain of the non-volatile random access memory; . . . and restarting the downloading program stored in the non-volatile random access memory for recovering the control program when the examined version domain of the non-volatile random access memory includes the predetermined value.

For reasons similar to those set forth in the above, Metz et al. and Yen fail to teach or suggest at least these elements of claim 42. Therefore, claim 42 is patentable over Metz et al. and Yen. Claim 46 depends from claim 42 and is therefore also patentable over Metz et al. and Yen at least for the same reasons as claim 42.


In view of the foregoing remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims 27, 28, 32, 42, and 46.

If there is any fee due in connection with the filing of this response, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: January 24, 2006

By:   
\_\_\_\_\_  
Qingyu Yin  
Ltd. Rec. No.: L0222